

**IN THE UNITED STATES DISTRICT COURT  
FOR THE WESTERN DISTRICT OF NORTH CAROLINA  
STATESVILLE DIVISION**

RAMONA WINEBARGER and REX WINEBARGER,  
Plaintiffs,

**CASE NOS. 5:15CV57-RLV;  
3:15CV211-RLV**

v.  
BOSTON SCIENTIFIC CORPORATION,  
Defendant

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MARTHA CARLSON,  
Plaintiff,

v.  
BOSTON SCIENTIFIC CORPORATION  
Defendants

**PLAINTIFFS OBJECTIONS AND COUNTER DESIGNATIONS TO DEFENDANT  
BOSTON SCIENTIFIC'S COUNTER DEPOSITION DESIGNATIONS OF  
ALFRED INTOCCIA, JR. TAKEN AUGUST 9, 2013**

BSC Counter Designation	Objection	Plaintiffs Counter Designation to BSC Counter Designation
ai073113, (Pages 58:19 to 59:20) 58 19 Q If a product is inadequately tested and it is 20 then released on the market and a lot of people are hurt 21 by that product, if the product was inadequately tested, 22 that's the company's fault, isn't it? 23 A The company has a very well-defined process for 24 developing products that -- cross- functionally, that 59 1 means all functions, marketing, clinical, regulatory, 2 manufacturing, all have to follow standard operating	58:19-59:20 FRE 401, 402, 403 FDA	

<p>3 procedures. And you cannot skip steps. You have to</p> <p>4 complete all of that, all of those activities which</p> <p>5 includes testing before the product can launch.</p> <p>6 So for instance, when I'm under pressure by a</p> <p>7 business team, they're anxious to get a new product to</p> <p>8 market, the division president is interested in my</p> <p>9 launching, moving more quickly towards getting products</p> <p>10 out the door and views that products are late. It's</p> <p>11 because we're going through the appropriate steps, and</p> <p>12 those steps take what they take in terms of timeline.</p> <p>13 And one of the things that I need to do as head</p> <p>14 of R&amp;D is be assured that we follow those steps.</p> <p>15 There's a sequence to them. There's a depth of testing</p> <p>16 that has to be done. There's a rigor in that testing</p> <p>17 that assures that the product going out the door is safe</p> <p>18 and effective.</p> <p>19 And that product is submitted to the FDA, and</p> <p>20 the FDA clears it via different regulatory pathways.</p>		
<p>ai073113, (Page 310:1 to 310:13)</p> <p>310</p> <p>1 Q Good evening, Mr. Intoccia. Please tell the</p> <p>2 jury a little bit about yourself. Introduce yourself to</p> <p>3 the jury for me, please.</p> <p>4 A I am a married father of three adult-stage</p> <p>5 children. I live in Nashua, New Hampshire. I do enjoy</p> <p>6 living in the state, the state of no income tax, the</p> <p>7 state of beautiful lakes, White Mountains. I enjoy the</p> <p>8 area.</p>	<p>BSC has previously designated this testimony. Plaintiffs adopt and incorporate the objections set forth in their counter designations, if any.</p>	<p>Plaintiffs adopt and incorporate their counter designations, if any.</p>

<p>9 Q Very good.</p> <p>10 A I've worked in medical devices for 39,</p> <p>11 40 years</p> <p>12 at this point.</p> <p>13 Q Do you currently work for Boston Scientific?</p> <p>14 A I do not.</p>		
<p>ai073113, (Pages 310:23 to 311:7)</p> <p>310</p> <p>23 Q And let's talk about your work experience in</p> <p>24 research and development. Where did you first work as</p> <p>311</p> <p>1 an engineer?</p> <p>2 A I first worked as a research and development</p> <p>3 engineer for Bentley Baxter Laboratories in Irvine,</p> <p>4 California, developing artificial kidneys for use in</p> <p>5 dialyzer, dialysis, hemodialysis markets, and also</p> <p>6 developing connective blood tubing sets for moving a</p> <p>7 patient's blood to these artificial kidneys.</p>	<p>BSC has previously designated this testimony. Plaintiffs adopt and incorporate the objections set forth in their counter designations, if any.</p>	<p>Plaintiffs adopt and incorporate their counter designations, if any.</p>
<p>ai073113, (Pages 311:16 to 317:4)</p> <p>311</p> <p>16 Q And when were you at Baxter? What years?</p> <p>17 A '78 and '79.</p> <p>18 Q And where did you go next?</p> <p>19 A Next I went to C.R. Bard. I was with Bard for</p> <p>20 multiple years. I believe it was 14 years I was with</p> <p>21 Bard. Starting in 1979 I worked as a project engineer</p> <p>22 for Bard developing cardiopulmonary bypass surgery</p> <p>23 disposables. Basically it's a heart-lung machine. An</p> <p>24 artificial lung is used by surgeons with patients who</p> <p>312</p> <p>1 are undergoing bypass surgery or heart valve surgery.</p> <p>2 Q And it looks like, according to what we've</p> <p>3 marked as Exhibit 451, which is a copy of your resume,</p>	<p>BSC has previously designated this testimony. Plaintiffs adopt and incorporate the objections set forth in their counter designations, if any.</p>	<p>Plaintiffs adopt and incorporate their counter designations, if any.</p>

<p>4 that you had a number of positions at Bard. Is that</p> <p>5 right?</p> <p>6 A I did. I moved through project engineer</p> <p>7 through engineering manager and then several years as</p> <p>8 director of new business development, which was outside</p> <p>9 of R&amp;D, working for the marketing organization for</p> <p>10 exploration of acquisitions.</p> <p>11 And then director of R&amp;D acting '91 to '93. And</p> <p>12 then concluded as an R&amp;D program director for the</p> <p>13 division, again managing a large cross- functional team</p> <p>14 focusing on this Quantum membrane oxygenator, which is</p> <p>15 again an artificial lung associated with cardiac bypass</p> <p>16 surgery.</p> <p>17 Q So what -- Tell the jury what you were doing.</p> <p>18 Describe what your responsibilities were as R&amp;D program</p> <p>19 director and director of R&amp;D at Bard.</p> <p>20 A Program director, I managed a team of</p> <p>21 approximately 20 cross-functional individuals, dotted</p> <p>22 line; in other words, indirectly. And the job of -- My</p> <p>23 job was to -- from conception all the way through to</p> <p>24 commercialization, develop this hollow fiber membrane</p> <p>313</p> <p>1 oxygenator product, this artificial lung.</p> <p>2 So I went through the various phases associated</p> <p>3 with product development through the definition of what</p> <p>4 we're going to do, the market research associated with</p> <p>5 the -- associated with the product, interaction with the</p> <p>6 physicians, benchmarking competitive products,</p> <p>7 developing various prototypes and configurations,</p>		
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<p>8 testing the product on the bench as well as in animals</p> <p>9 to be assured that the product that we were developing</p> <p>10 was meeting the design input requirements, in other</p> <p>11 words, the product specifications.</p> <p>12 Q Okay. And then following C.R. Bard, where did</p> <p>13 you go work next?</p> <p>14 A I went to Minntech Corporation in Plymouth,</p> <p>15 Minnesota, where I was the business unit general</p> <p>16 manager. So I managed a team of -- a director of sales,</p> <p>17 director of marketing, director of manufacturing,</p> <p>18 director of research and development. And it was a</p> <p>19 small business unit that had the responsibility of</p> <p>20 managing the business associated with this Biocor</p> <p>21 membrane fiber oxygenator, again another artificial lung</p> <p>22 used in open heart surgery.</p> <p>23 Q Another medical device?</p> <p>24 A Another medical device.</p> <p>314</p> <p>1 Q And then following Minntech, you went to, it</p> <p>2 looks like, TFX Medical. What did you do there?</p> <p>3 A I was a vice president of vascular access</p> <p>4 devices. So I had responsibility for the managing of</p> <p>5 the business so I had profit and loss responsibilities</p> <p>6 for that business.</p> <p>7 I managed the team such that we made the hard</p> <p>8 choices about where to invest, ultimately where the</p> <p>9 products would be marketed, what new products we would</p> <p>10 be investing in, what products -- the products that were</p> <p>11 manufactured, maintaining the manufacturability of</p>		
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<p>12 those products, maintaining the quality of the products.</p> <p>13 So it was, in effect, a small business.</p> <p>14 And the real, I feel, advantage learning there</p> <p>15 was being able to function at a general manager level.</p> <p>16 Q And that was another medical-device company?</p> <p>17 A It was another medical-device company, yes.</p> <p>18 Q And then it looks like you went to MedSource</p> <p>19 Technologies for a short time in 2001. What did you do</p> <p>20 at MedSource?</p> <p>21 A I was director of engineering. It was again</p> <p>22 another medical company associated with endoscopy</p> <p>23 devices. I was there for a short period of time. So</p> <p>24 what I was able to do is realign personnel to have -- be</p> <p style="text-align: center;">315</p> <p>1 more effective. We implemented research and development</p> <p>2 metrics, updated the design control procedures, which</p> <p>3 were antiquated, and then completed a product that had</p> <p>4 been previously started before I was there that was</p> <p>5 brought to MedSource by Johnson &amp; Johnson. It was a</p> <p>6 vein-harvesting device associated with varicose veins.</p> <p>7 Q And it looks like you were at MedSource for</p> <p>8 just a short time and then started at Boston Scientific</p> <p>9 in 2001. Is that right?</p> <p>10 A Yes. I moved to -- as an R&amp;D director for</p> <p>11 Boston Scientific in April of 2001.</p> <p>12 Q Why did you move to Boston Scientific in 2001?</p> <p>13 A I was recruited by Boston Scientific out of</p> <p>14 MedSource. As part of the process of leaving TFX</p>		
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<p> 15 Medical and looking for a new position with  recruiters  16 and working and my resume in effect on the  street, I was  17 approached by Boston Scientific as a part of  that  18 initial search while I had accepted that  MedSource  19 position.  20 And I interviewed at Boston Scientific,  and I  21 saw it as an extremely valuable role to me  and something  22 that I really wanted to do, get into the  company. So I  23 took the position as -- of R&amp;D director,  urology and  24 women's health, when it was offered.  316  1 Q And you were at Boston Scientific, like  you  2 said, until 2012. During that period of time  were you  3 always in the R&amp;D group?  4 A I was.  5 Q Prior to working at Boston Scientific,  did you  6 have R&amp;D experience in these other positions  that you  7 talked about?  8 A I did. Almost all of my experience, with  the  9 exception of director of new business  development at  10 C.R. Bard, was R&amp;D related or general  manager related.  11 Q And did you have experience in R&amp;D  of -- in  12 medical devices prior to coming to Boston  Scientific?  13 A I did. All of my experience for the last  39,  14 40 years has been in medical devices.  15 Q And when you came to Boston  Scientific in 2001  16 as the R&amp;D director, what did you do? What  were some of  17 your responsibilities?  18 A Responsibilities were to manage a  small team of </p>		
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<p>19 research and development engineers. We were focusing on</p> <p>20 the women's health market primarily, develop products</p> <p>21 for stress urinary incontinence otherwise known as</p> <p>22 slings, and developed multiple products in that area.</p> <p>23 Also managed the portfolio committee for the</p> <p>24 division making a determination on next areas for</p> <p>317</p> <p>1 investment in our R&amp;D programs linked to, you know,</p> <p>2 five-year strategic plans where the division wanted to</p> <p>3 go in terms of specific markets or market areas or</p> <p>4 product lines.</p>		
<p>ai073113, (Page 318:4 to 318:18)</p> <p>318</p> <p>4 Q And then you were promoted to vice president of</p> <p>5 R&amp;D in 2005. Describe for the jury how your</p> <p>6 responsibilities changed from being R&amp;D director to vice</p> <p>7 president of R&amp;D.</p> <p>8 A Well as vice president of R&amp;D you're a member</p> <p>9 of the division management board. So you are providing</p> <p>10 input on strategic decisions, strategic direction of the</p> <p>11 division. I manage a much larger organization of</p> <p>12 people.</p> <p>13 There was 90 people plus, consisting of</p> <p>14 program managers, engineers, scientists, all identifying either</p> <p>15 new opportunities or working on specific programs that</p> <p>16 had been determined by the portfolio committee as areas</p> <p>17 we want to invest in for products and bringing the</p> <p>18 products to market, new and improved products to market.</p>	<p>BSC has previously designated this testimony. Plaintiffs adopt and incorporate the objections set forth in their counter designations, if any.</p>	<p>Plaintiffs adopt and incorporate their counter designations, if any.</p>



<p>ai073113, (Pages 320:11 to 321:8) 320</p> <p>11 Q In terms of your responsibilities from 2001 to 2012 at Boston Scientific, were there a number of</p> <p>12 projects that were happening in the R&amp;D division while</p> <p>13 you were there?</p> <p>14 A Yes. Typically in play on an annual basis</p> <p>15 there were 20 to 30 projects a year that we were working</p> <p>16 on in various stages of development, anywhere from</p> <p>17 exploratory work at a very low investment level to tech</p> <p>18 deb projects, which were pre-- active projects that were</p> <p>19 solving specific technical problems associated with a</p> <p>20 product or a product line.</p> <p>21 We were trying to answer a very critical</p> <p>22 question regarding a new potential product that needed</p> <p>23 to be resolved before that project was moved into an</p> <p>321</p> <p>1 active project phase.</p> <p>2 There were approximately 14 active projects out</p> <p>3 of that let's call it 30 programs in total that were in</p> <p>4 what's called the PDP active project designation. So</p> <p>5 these were projects that decisions had been made. We're</p> <p>6 actively going to invest. We put a cross-functional</p> <p>7 team in place, and we're going to develop this product</p> <p>8 and bring it to market.</p>	<p>BSC has previously designated this testimony. Plaintiffs adopt and incorporate the objections set forth in their counter designations, if any.</p>	<p>Plaintiffs adopt and incorporate their counter designations, if any.</p>
<p>ai073113, (Page 321:15 to 321:20) 321</p> <p>15 (Exhibit Number 471</p> <p>16 marked for identification)</p> <p>17 Q What is Exhibit 471?</p> <p>18 A It was a presentation that I provided on the</p> <p>19 details associated with a new-product development</p>	<p>BSC has previously designated this testimony. Plaintiffs adopt and incorporate the</p>	<p>Plaintiffs adopt and incorporate their counter designations, if any.</p>

20 process.	objections set forth in their counter designations, if any.	
<p>ai073113, (Page 322:2 to 322:16) 322</p> <p>2 Q I want to turn your attention over to page 4.</p> <p>3 What were you depicting on this slide?</p> <p>4 A I was trying to depict at a very high-level</p> <p>5 summary of what it takes and what are the stages and</p> <p>6 steps that it takes to develop a new product within the</p> <p>7 Boston Scientific system.</p> <p>8 So there's five phases within the Boston</p> <p>9 Scientific system. It starts with a proposal and ends</p> <p>10 with commercialization of the product.</p> <p>11 At the proposal phase, which is the initial</p> <p>12 phase, there's a lot of business planning, there's a lot</p> <p>13 of project planning, there's a lot of physician input,</p> <p>14 market research, trying to really understand what does</p> <p>15 the team want to do, what does the business want the</p> <p>16 team to accomplish.</p>	<p>BSC has previously designated this testimony. Plaintiffs adopt and incorporate the objections set forth in their counter designations, if any.</p>	<p>Plaintiffs adopt and incorporate their counter designations, if any.</p>
<p>ai073113, (Pages 322:21 to 326:19) 322</p> <p>21 Q Would this process have been the general</p> <p>22 process used to develop the medical devices Uphold and</p> <p>23 Pinnacle?</p> <p>24 A Yes, it would.</p> <p>323</p> <p>1 Q Let's talk a little bit about the proposal</p> <p>2 stage. You talk about physician input. Describe for</p> <p>3 the jury what that means and how you obtained physician</p> <p>4 input at the early stage of a project like this.</p> <p>5 A Physician input, physician requirements define</p> <p>6 what does the physician require in terms of the product</p>	<p>BSC has previously designated this testimony. Plaintiffs adopt and incorporate the objections set forth in their counter designations, if any.</p>	<p>Plaintiffs adopt and incorporate their counter designations, if any.</p>

<p>7 in order to be able to utilize that product in a  8 specific procedure. What are the needs of that  9 physician customer in the product.  10 And a lot of time is spent with  physicians at  11 this point, a lot of market research, individual  12 interviews, focus groups, advisory boards are  assembled,  13 physicians are presented with concepts,  physicians are  14 providing feedback through the development  process.  15 This is the start where you're actually  16 defining user requirements for the product.  And it  17 precedes actually establishing product -- firm  product  18 engineering specifications, in other words,  design  19 input requirements.  20 Q So does Boston Scientific document  that input  21 that it receives from doctors at this stage?  22 A Absolutely, yes.  23 Q And how is that done?  24 A It's done in many ways. It's done in  the form</p> <p style="text-align: center;">324</p> <p>1 of minutes. It's done in the form of ultimately  output  2 specifications. User needs are listed and  prioritized  3 and tested again with different groups.  They're  4 weighted in a way that ultimately the  company can  5 determine what are the most important user  needs in the  6 eyes of physicians.  7 And that in turn is used to help design  the  8 product and make design trade-offs within the  product  9 based on our customers' input.  10 Q Do all products and projects get past  this  11 proposal phase?  12 A No.  13 Q And why not?  14 A No, they don't.</p>		
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<p> 15 I mean, a business case is being made in  the  16 proposal phase that is going to be assessed on  its  17 merits, although I would say that relatively --  within  18 Boston Scientific a relatively high majority of  projects  19 that enter this product development process  does result  20 in some commercialization of a product.  21 And it's primarily because there's a  phase -- a  22 process before this process where -- it's  referred to as  23 an exploratory -- exploratory program that  does a lot of  24 planning and assessment of the business.  And the output  325  1 of that -- successful output of that process, the  2 exploratory process, feeds this proposal phase.  3 So most products are probably going to  make it  4 through this, but there are definitely products  that  5 don't make it through the process.  6 Q There's physician input at the proposal  stage.  7 Is there physician input and does Boston  8 Scientific work with physicians throughout  the  9 development process?  10 A Yes. There's really physician input all  the  11 way through the point where you're freezing  the design  12 and then beyond that where you're actually  validating  13 the design.  14 So through the entire process you're  reaching  15 out to physicians to get their feedback, review  the work  16 that's been done, have them understand and  evaluate the  17 product and provide feedback, and if  necessary, the  18 product-development team is making changes  based on that  19 input. </p>		
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<p>20 Q So for the SUI devices like Solyx and Advantage</p> <p>21 and the pelvic organ prolapse products like Uphold and</p> <p>22 Pinnacle, describe for the jury how Boston Scientific</p> <p>23 would get physician feedback through the process.</p> <p>24 A As an example, one would go out and work with</p> <p style="text-align: center;">326</p> <p>1 physicians to understand what their preferences were</p> <p>2 relative to products. For instance, you would have them</p> <p>3 evaluate positives and negatives associated with</p> <p>4 competitor products so that you would understand what</p> <p>5 their likes and dislikes are.</p> <p>6 And then using input that's obtained from the</p> <p>7 physicians on what they envision a product might look</p> <p>8 like, you would -- the project team would then go create</p> <p>9 a series of concept drawings or concept models and again</p> <p>10 go back out to the clinicians and ask, "How would you</p> <p>11 evaluate something that might look like this and have</p> <p>12 these sort of performance characteristics?" and take</p> <p>13 that feedback back to the project team and then create a</p> <p>14 next-step prototype and then go back out again to the</p> <p>15 physician and continue to do that through that</p> <p>16 development process until you're actually able to</p> <p>17 produce something that -- a series of physicians, a</p> <p>18 number of physicians, sometimes 50, sometimes</p> <p>19 100 physicians, would provide positive feedback.</p>		
<p>ai073113, (Pages 327:17 to 336:17)</p> <p style="text-align: center;">327</p>	<p>BSC has previously designated</p>	<p>Plaintiffs adopt and incorporate their counter designations, if any.</p>

<p>17 Q I want to go back to our chart here. The next</p> <p>18 step in the process is the definition phase. Describe</p> <p>19 for the jury what that means.</p> <p>20 A The definition phase is you're zeroing in on</p> <p>21 the design. You're determining what you want to do and</p> <p>22 how you want to do it based on physician requirements.</p> <p>23 You're pulling together various concepts that you're</p> <p>24 testing out in the marketplace, and you're doing</p> <p style="text-align: center;">328</p> <p>1 laboratory testing.</p> <p>2 Q And then the next stage says development. What</p> <p>3 does that mean?</p> <p>4 A Development is actually when you're translating</p> <p>5 the input from the customers and taking the concepts and</p> <p>6 you're putting together specific product design</p> <p>7 requirements. In other words, what the form, fit, and</p> <p>8 function of the product is going to be, what the product</p> <p>9 looks like, how it's going to work.</p> <p>10 You finalize the design, you verify various</p> <p>11 aspects of the product either through prototype testing</p> <p>12 or through evaluation in animals, animal models, and you</p> <p>13 move towards finalizing freezing that design.</p> <p>14 At the same time you're starting in parallel</p> <p>15 with that the process development associated with</p> <p>16 manufacturing the product. You're developing some</p> <p>17 prototype manufacturing equipment to produce the product</p> <p>18 so that ultimately you can manufacture the product in</p> <p>19 its close-to-final configuration to do some final</p>	<p>this testimony. Plaintiffs adopt and incorporate the objections set forth in their counter designations, if any.</p>	
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<p> 20 testing to verify the design of the product and  verify  21 that that design meets the product  specification that  22 was established up front.  23 Q For the Boston Scientific slings and  POP kits,  24 does Boston Scientific make -- do  biocompatibility  329  1 testing to determine whether or not the mesh  and the  2 product is biocompatible?  3 A Yes. There's an entire organization  department  4 within Boston Scientific that does  biocompatibility  5 work. There's standardized tests that are  used to  6 determine biocompatibility for all materials.  7 That biocompatibility group has the  expertise,  8 the knowledge, the capability of running  batteries of  9 tests that determine the biocompatibility of  the  10 product -- the material for use in the product.  11 They also test the materials once they're  12 actually assembled into the final  configuration of a  13 product, too, because you're concerned also  about the  14 interaction of various materials in a  configuration, and  15 the processes that are used to put those  various  16 materials together can also modify materials.  For  17 instance, if you weld them or heat them or  things of  18 that nature, it can change the characteristic  of the  19 material.  20 So they have specific biocompatibility  tests,  21 batteries of tests that they put them through.  Every  22 single material at Boston Scientific is handled  that  23 way.  24 Q And would those tests be done at the </p>		
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<p style="text-align: center;">330</p> <p>1 development stage?</p> <p>2 A They could be done as early -- if things are</p> <p>3 well-defined, they could be done as early as late</p> <p>4 definition phase, but primarily they're done in the</p> <p>5 development phase.</p> <p>6 Q And then the next step is validation and scale-</p> <p>7 up. Tell the jury what that means.</p> <p>8 A So once the product design is frozen and the</p> <p>9 product has been verified as meeting its initial product</p> <p>10 specification -- in other words, it works well, the</p> <p>11 performance of the product is such that it's as 12 specified and predicted, the product meets those</p> <p>13 specification requirements -- the decision is made to</p> <p>14 move into process development work, so all of the</p> <p>15 equipment associated with manufacturing the product and</p> <p>16 manufacturing it in such a way that it's extremely</p> <p>17 repeatable.</p> <p>18 The process validation work is something that</p> <p>19 is handled by the manufacturing and engineering team as</p> <p>20 part of the manufacturing group. And in parallel with</p> <p>21 that you're preparing for design validation. Design</p> <p>22 validation is conducted to determine does the product</p> <p>23 meet the initial user requirements or the physician</p> <p>24 requirements, the physician needs.</p> <p style="text-align: center;">331</p> <p>1 And product that's produced on the</p> <p>2 manufacturing process that's validated, samples are</p> <p>3 taken from that, and those products are then presented</p> <p>4 to physicians typically in the form of a test that</p>		
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<p> 5 simulates the final use environment, simulates  the  6 operating room for instance in this case. And  it's  7 conducted by physician customers to  determine does the  8 product work as it's specified that it should.  9 Once that design validation is done and  it's  10 understood that the product meets its design  11 requirements, manufacturing is scaled up to a  high  12 level.  13 This is the point at which the product  would  14 have been submitted to various regulatory  agencies,  15 whether it's the FDA or Japan PMDA, other  global  16 regulatory bodies.  17 And then once the product has passed  its final  18 process validation, design validation activity,  it moves  19 into a commercialization phase where  ultimately it's  20 brought to market.  21 Q So is it the R&amp;D organization, R&amp;D  team that's  22 carrying all of these activities forward, or are  there  23 other departments involved as well?  24 A You know, all product development at  Boston </p> <p style="text-align: center;">332</p> <p> 1 Scientific is done cross-functionally so all  functions  2 are represented as part of this process.  3 Product development, the R&amp;D, the  development  4 work associated with a new product, it's the  only  5 activity in the company that made use of all  functions  6 within the company. All functions participate  to some  7 level, some very directly, some indirectly, in  the  8 product development process.  9 Q So what functions would that include? </p>		
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<p>10 A The core project teams are made up of  11 quality,  12 regulatory, manufacturing, engineering, and  13 certainly  14 research and development, clinical,  15 marketing. Those  16 are the primary core members of the team.  17 Q And what is medical's role in the  18 project team?  19 A Medical has the responsibility for  20 understanding risk and completing risk  21 documentation  22 associated with the product, making an  23 assessment of  24 risk. So there's a series of documents -- risk  25 documents that are prepared primarily by  26 the quality  27 organization but with input from the total  28 team in such  29 a way.  30 And then medical then reviews the risk  31 safety  32 benefit associated with the product as  33 designed and  34 developed.</p> <p>333</p> <p>1 Q And then you mentioned clinical. What  2 would  3 clinical's role be in the project team?  4 A Clinical is determining, you know, what  5 is  6 necessary in terms of potential clinical testing  7 and  8 when clinical testing should occur with that  9 new product  10 or that product modification.  11 Most of the time in the division, urology  12 women's health, because the product was a --  13 what's  14 referred to as a simple 510(k) regulatory  15 pathway, that  16 doesn't require clinicals until -- it doesn't  17 require  18 clinicals to be approved by the agency.  19 Clinical trials are done after launch, but  20 in  21 some instances where there's a different  22 regulatory  23 pathway known as a PMA there are clinical  24 trials</p>		
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<p>15 conducted on the products before they come to market.</p> <p>16 Q If you'd turn over to Slide 23 for me, this</p> <p>17 slide talks about and describes something called a</p> <p>18 design review. Tell the jury what a design review is.</p> <p>19 A A design review is an ascertainment by the core</p> <p>20 team plus other key individuals. That ascertains is the</p> <p>21 product meeting its design input requirements, is it</p> <p>22 moving through this phase gate process in such a way</p> <p>23 that's appropriate. And by "appropriate" I mean it</p> <p>24 meets the standard operating procedures of the division.</p> <p>334</p> <p>1 And typically the project team -- or the</p> <p>2 project team is required to bring in independent</p> <p>3 reviewers associated with design reviews to assure that</p> <p>4 there's no bias in terms of the project, the project</p> <p>5 team. And those reviewers are very critical of the</p> <p>6 design elements that are being presented.</p> <p>7 It can be associated with design and</p> <p>8 development. It can be associated with product</p> <p>9 specification there's a design review. In other words,</p> <p>10 when you put together the design specification, form,</p> <p>11 fit, and function of the product, it's reviewed in a</p> <p>12 design review and challenged.</p> <p>13 At the design freeze, very important, design</p> <p>14 review where the product is virtually complete from a</p> <p>15 design perspective, from that standpoint. And there's a</p> <p>16 lot of -- it is an extensive design review with a lot of</p> <p>17 challenge relative to the design. Design verification,</p>		
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<p>18 design review, first human use, and then a design</p> <p>19 transfer is the transfer of the product to manufacturing</p> <p>20 or operation.</p> <p>21 Q So there would be these reviews at various</p> <p>22 points in time during the development process?</p> <p>23 A There would be.</p> <p>24 Q And were these design reviews done during the</p> <p>335</p> <p>1 development of Boston Scientific's slings and pelvic</p> <p>2 organ prolapse devices?</p> <p>3 A They were.</p> <p>4 Q Why -- The process, the five-step process, why</p> <p>5 is that process used at Boston Scientific? Why use that</p> <p>6 process? What's the purpose?</p> <p>7 A It's a process that's used not only in medical</p> <p>8 device development. It's a process that's used in</p> <p>9 development of many new products across multiple</p> <p>10 industries.</p> <p>11 The reason it's done is it's a tried and true</p> <p>12 process. It's very successful. It's a way to challenge</p> <p>13 the engineering teams, challenge the assumptions, to be</p> <p>14 assured that the work that's being done is appropriate</p> <p>15 and meets specification.</p> <p>16 Within Boston Scientific, there are key</p> <p>17 elements in the medical device design and development</p> <p>18 that are unique, of course. It's critical that the</p> <p>19 design history file work meet what's referred to by the</p> <p>20 FDA as design controls.</p> <p>21 And the FDA puts design control guidance</p> <p>22 procedures in place that medical-device companies follow</p> <p>23 in such a way to be assured that the right</p>		
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<p>24 considerations for physician and patient are kept in</p> <p>336</p> <p>1 mind as the product is being developed.</p> <p>2 Q When designing products at Boston Scientific</p> <p>3 like the sling products and the pelvic organ prolapse</p> <p>4 products, what is the goal? What is the focus? What</p> <p>5 are you trying to accomplish through the R&amp;D process?</p> <p>6 A Well, what you're trying to do is you're trying</p> <p>7 to develop a product that meets a physician user need.</p> <p>8 You're trying to develop a product that in some way</p> <p>9 improves the procedure, makes it safer, makes it easier,</p> <p>10 and makes it faster. Faster will reduce anesthesia</p> <p>11 times which means there will be lower risk, for</p> <p>12 instance, for a patient.</p> <p>13 You're trying to improve upon the product in</p> <p>14 such a way that it's differentiated, ultimately from a</p> <p>15 business perspective may be more competitive. All those</p> <p>16 factors are put into play when defining a product and</p> <p>17 then ultimately developing and commercializing it.</p>		
<p>ai073113, (Page 337:3 to 337:10)</p> <p>337</p> <p>3 Q Do you believe that the research and</p> <p>4 development process at Boston Scientific produced safe</p> <p>5 and effective medical devices to treat pelvic organ</p> <p>6 prolapse?</p> <p>7 A I do.</p> <p>8 Q And included in those products would be the</p> <p>9 Uphold and Pinnacle lines?</p> <p>10 A Correct.</p>	<p>BSC has previously designated this testimony. Plaintiffs adopt and incorporate the objections set forth in their counter designations, if any.</p>	<p>Plaintiffs adopt and incorporate their counter designations, if any.</p>

**1. Objections to Counter Exhibits.**

- a. Intoccia 451 and 471 have been previously identified by BSC. Plaintiffs adopt and incorporate their objections as set forth in their counter-designations, if any.

**2. Counter Exhibits to Counter Exhibits**

- a. Plaintiffs adopt and incorporate the exhibits designated in counter designations regarding this witness.

DATED: July 20, 2015

Respectfully Submitted,

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**CERTIFICATE OF SERVICE**

I hereby certify that on July 20, 2015, I electronically filed the foregoing document with the Clerk of the Court using the CM/ECF system which will send notification of such filing to the CM/ECF participants registered to receive service in this MDL.

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